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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/924,200	08/07/2001	Quintin T. Phillips	10002608-1	2177

7590 10/21/2003

HEWLETT-PACKARD COMPANY
Intellectual Property Administration
P.O. Box 272400
Fort Collins, CO 80527-2400

EXAMINER

BEATTY, ROBERT B

ART-UNIT	PAPER NUMBER
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2852

DATE MAILED: 10/21/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/924,200

Applicant(s)

PHILLIPS ET AL.

Examiner

Robert Beatty

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 July 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6,8,9 and 11-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6,8,9 and 11-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-3,6,11-14,16,19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsunaga (JP#04-184464) in view of Shimoyama et al.

Matsunaga teach an imaging system comprising a plurality of consumable replaceable toner cartridges 5A, 5B, 5C, and 5D which are insertable into and ejectable out of an opening (no reference numeral) in the imaging system via a guide system 10A-10D and 23,22,19. The plurality of cartridges are mounted in a rotatable carousel having a door 30. If a toner end detection is detected via sensor 24,25, a cartridge is automatically ejected out of the image forming system from the opening. An access door 30 which is openable and closable is provided remote from the actual opening in which the toner cartridges pass. As seen in Fig. 6, the toner cartridge is guided into position through the opening with the access door in the closed position. Specifically, Matsunaga teach everything claimed except the guide system comprising a series of cooperating spring-loaded levers and motor-driven cams.

Shimoyama et al. teach a cassette loading system which comprises spring-loaded levers 34,35 and a motor-driven cam 31 to move a cassette 1 into and out of a cassette holder. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the cassette insertion and ejection mechanism disclosed in Shimoyama et al. to move the toner cartridge because the cassette can be erroneously loaded as taught in Shimoyama et al. Also, see page 5, line 7-18, of the applicant's specification.

2. Claims 4-5,15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsunaga (JP# 04-184464) in view of Shimoyama et al. as applied to claims 1-3,6,11-14,16,19-20 and further in view of Tani et al.

Matsunaga and Shimoyama et al. taught supra discloses everything claimed except a display which will display the toner end signal. Tani et al. teach an imaging system having a replaceable toner cartridge 27 insertable into an opening 23a. When it is detected by a sensor 22 that a toner is nearly depleted, a message on a display will inform the operator to supply toner. It would have been obvious to one of ordinary skill in the art at the time the invention was made to display a toner end signal to the operator because the operator can be informed of the status of the imaging system.

3. Claims 1,6,8-9,13,16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kitajima et al. in view of Shimoyama et al. and Kasamura et al.

Kitajima et al. teach an imaging system comprising a plurality of replaceable toner cartridges 1, a plurality of openings 2, and guides (such as the walls of the openings) which guide the cartridge into an in-use position. Access doors 100b are openable and closable so as to gain access to the image forming parts and is completely unrelated to the toner cartridge loading system. The toner cartridges are configured to be loaded while the access door is in the closed position. Specifically, Kitajima et al. teach everything claimed except the cartridges and openings having registration key/fin mechanisms which allow an appropriate cartridge to be loaded. In addition, the guide system comprising a series of cooperating spring-loaded levers and motor-driven cams is not taught.

Shimoyama et al. teach a cassette loading system which comprises spring-loaded levers 34,35 and a motor-driven cam 31 to move a cassette 1 into and out of a cassette holder. Kasamura et al. teach an imaging system having a replaceable toner cartridge 32 which is insertable into an opening 23a in the imaging system. The cartridge has a fin 33 which mates with a slot 24 of the opening so that an appropriate cartridge can be inserted into the system. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the cassette insertion and ejection mechanism disclosed in Shimoyama et al. to move the toner cartridge because the cassette can be erroneously loaded as taught in

Shimoyama et al. It further would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the cartridges in Kitajima et al. with the fin/slot mechanism in Kasamura et al. because containers having different color toner can always be inserted in the correct dispensing location.

4. Applicant's arguments with respect to claims 1-6,8-9,11-20 have been considered but are moot in view of the new ground(s) of rejection.

The applicant has amended the claims to include the specific type of loading mechanism however, upon review of the specification (page 5, lines 7-18) it appears that this type of loading mechanism is well known to those skilled in the art and exemplified by U.S. Pat. No. 5,757,578.

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory

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action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert Beatty whose telephone number is 703-308-1372. The examiner can normally be reached on M-F from 9 to 6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Arthur Grimley, can be reached on (703) 308-1373. The fax phone number for the organization where this application or proceeding is assigned is 703-308-3431.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1782.

A handwritten signature in black ink, appearing to read 'Robert Beatty', with a long, sweeping horizontal line extending from the end of the signature.

Robert Beatty
Primary Examiner
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